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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,437	03/02/2002	Kimmo Laiho	004770.00033	3461

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EXAMINER	
NGUYEN, TU X	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,437	LAIHO ET AL.	
	Examiner	Art Unit	
	Tu X. Nguyen	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,8,9,15-20,27-31,34,35,37,40 and 42-46* is/are rejected.

7)☒ Claim(s) *4-7,10-14,21,23-26,32,33,35,38,39,41 and 47-51* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date .
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-51 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 8-9, 16-18, 44 and 46, are rejected under 35 U.S.C. 103(e) as being unpatentable over Jasinaki (US Patent 5,070,329) in view of Tat et al. (US Patent 6,298,225) and further in view of Sayers et al. (US Patent 6,539,237).

Regarding claim 1, Jasinaki discloses a method for providing streaming information from a service provider to a mobile terminal, said method comprising the steps of:

buffering (see col.3 lines 57-59) a first portion of an information stream in a first service input buffer as buffered data (see col.7 lines 41-49);

powering-up a receiver in the mobile terminal in synchronicity with said transmission burst such that the mobile terminal is powered-up when said transmission burst is being transmitted (see col.10 lines 17-18); and buffering said transmission burst in a receiver input buffer (see 228, fig.4).

Jasinaki fails to disclose transmitting said buffered data as a transmission burst in a time-slicing signal, said transmission burst having a duration smaller than the duration of said portion of said information stream.

In an analogous arts, digital receiver, Sayers et al. disclose transmitting said buffered data as a transmission burst in a time-slicing signal, said transmission burst having a duration smaller than the duration of said portion of said information stream (see col.4 lines 35-45). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki with the above teaching of Sayers et al. in order to dividing streaming signals into blocks for protection against burst transmission errors.

Jasinaki fails to disclose a data burst.

Tat et al. disclose a data burst (see col.2 lines 35-36). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki with the above teaching of Tat et al. in order to provide a burst having a field for enabling the radio receiver to synchronize therewith.

Regarding claim 46, Jasinaki discloses a transmitter system for transmitting streaming information, said transmitter system comprising:

a service input buffer (see 210, 228, fig.4) for receiving the streaming information from a service provider; and a digital broadcast transmitter (see 24, fig.1) for transmitting said streaming information as bursts.

Jasinaki fails to disclose transmitting at a higher bit rate than the rate at which said streaming information is received from said service provider.

In an analogous arts, digital receiver, Sayers et al. disclose transmitting at a higher bit rate than the rate at which said streaming information is received from said service provider (see col.4 lines 35-45). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki with the above teaching of Sayers et al. in order to dividing streaming signals into blocks for protection against burst transmission errors.

Jasinaki fails to disclose a data burst.

Tat et al. disclose a data burst (see col.2 lines 35-36). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki with the above teaching of Tat et al. in order to provide a burst having a field for enabling the radio receiver to synchronize therewith.

Regarding claim 3, the modified Jasinaki discloses said buffered data comprises at least one of: a predetermined amount of said information stream and an amount of said information stream received during a predetermined time interval (see Sayers et al., col.4 lines 35-45).

Regarding claims 8-9, the modified Jasinaki discloses the step of powering-down said receiver a predefined interval of time subsequent to said step of powering-up said receiver (see Jasinaki, col.8 lines 55-56).

Regarding claim 16, the modified Jasinaki discloses buffering a portion of a second information stream in a second service input buffer as second buffered data; and transmitting said second buffered data as a second transmission burst, said second transmission burst having a duration smaller than the duration of said portion of said second information stream (see Sayers et al., col.4 lines 35-45).

Regarding claims 17 and 44, the modified Jasinaki discloses of multiplexing said transmission burst with said second transmission burst to produce a time-division multiplexed signal (see Sayers et al., col.2 lines 30-39).

Regarding claim 18, the modified Jasinaki discloses step of buffering said first encapsulated data (see Sayer et al., col.27 lines6-7) and second encapsulated data in a network operator input buffer.

Claim 2 is rejected under 35 U.S.C. 103(e) as being unpatentable over Jasinaki (US Patent 5,070,329) in view of Tat et al., in view of Sayers et al. (US Patent 6,539,237) and further in view of Prall (US Pub. 2003/0110233).

Regarding claim 2, the modified Jasinaki fails to disclose service input buffer comprises at least one member of the group consisting of: a first-in-first-out (FIFO) buffer, an elastic buffer, a ring buffer, and a dual buffer having separate input and output sections.

In an analogous arts, packetized data transmission, Prall discloses to disclose service input buffer comprises at least one member of the group consisting of: a first-in-first-out (FIFO) buffer, an elastic buffer, a ring buffer, and a dual buffer having separate input and output sections (see fig.4). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Jainaki with the above teaching of Prall in order to improve transmit/receive data efficiency.

Claims 19-20, 27-28, 31, 34, 40, 43 and 45, are rejected under 35 U.S.C. 103(a) as being obvious over Jasinaki (US Patent 5,070,329) in view of Tat et al. (US Patent 6,298,225).

Regarding claims 19 and 31, Jasinaki discloses a mobile terminal suitable for receiving streaming information provided by a service provider, said mobile terminal comprising:

a digital broadcast receiver for receiving at least a first portion of a transmission burst (see col.7 lines 41-49);

means for powering up said digital broadcast receiver at a pre-determined powered-up time (see col.10 lines 16-37);

a receiver input buffer for storing said transmission burst (see 228, fig.4); and

means for powering down said digital broadcast receiver at a pre-determined powered-down time (see col.8 lines 55-56, col.9 lines 10-14).

Jasinaki fails to disclose a data burst.

Tat et al. disclose a data burst (see col.2 lines 35-36). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki with the above teaching of Tat et al. in order to provide a burst having a field for enabling the radio receiver to synchronize therewith.

Regarding claim 20, the modified Jasinaki discloses pre-determined powered-up time occurs a specified period of time subsequent to said pre-determined powered-down time (see Jasinaki, col.8 lines 55-56, col.9 lines 10-14 and "timer", fig.4).

Regarding claim 27, the modified Jasinaki discloses said pre-determined powered-up time occurs an incremental period of time subsequent to transmission of said transmission burst (see Jasinaki, col.8 lines 55-56, col.9 lines 10-14 and "timer", fig.4).

Regarding claims 28 and 40, the modified Jasinaki discloses an application processor for converting said transmission burst into an information data stream (see Jasinaki col.9 lines 11-30).

Regarding claim 34, the modified Jasinaki discloses the information service provider provides at least one service via at least one information stream (see Jasinaki, col.8 lines 16-39).

Regarding claims 43 and 45, Jasinaki and Tat et al. fail to discloses a second information service provider for providing second streaming information; and a second service input buffer for storing at least an interval of said second streaming information; wherein said transmitter system broadcasts the contents of said second service input buffer as a second transmission burst. The Examiner takes an Official notice is taken that the concept "a second information service provider for providing second streaming information; and a second service input buffer for storing at least an interval of said second streaming information; wherein said transmitter system broadcasts the contents of said second service input buffer as a second transmission burst" are well known in the art. It would have been obvious plurality of broadcast stations transmitting different data streams such as video stream.

Claims 22 and 37, are rejected under 35 U.S.C. 103(e) as being unpatentable over Jasinaki (US Patent 5,070,329) in view of Tat et al., and further in view of Kalveram et al. (US Pub. 2001/0023184).

Regarding claims 22 and 37, Jasinaki and Tat et al. fail to disclose said pre-determined powered-up time occurs an incremental period of time prior to occurrence of said transmission burst.

In an analogous arts, bursts transmission in blocks, Kalveram et al. discloses pre-determined powered-up time occurs an incremental period of time prior to occurrence of said transmission burst (see par.019). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki and Tat et al. with the above teaching of Kalveram et al. in order to provide activate the mobile device in active mode before receiving a message.

Claims 29-30 and 42, are rejected under 35 U.S.C. 103(e) as being unpatentable over Jasinaki (US Patent 5,070,329) in view of Tat et al. and further in view of Drum et al. (US Patent 6,456,845).

Regarding claims 29-30 and 42, Jasinaki and Tat et al. fail to disclose a stream filter for stripping said encapsulation from said transmission.

In an analogous arts, tracing signal, Drum et al. disclose a stream filter for stripping said encapsulation from said transmission (see col.11 lines 32-33). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jasinaki and Tat et al. with the above teaching of Kalveram in order to provide signaling message and uses information contained therein to create and distribute a second signaling message filter criteria.

Allowable Subject Matter

Claims 4-7,10-14, 21, 23-26, 32-33, 35, 38-39, 41, 47-51 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding dependent claims 4, 34 and 38, the prior arts fail to teach "said step of powering-up said receiver occurs a specified interval of time prior to said step of transmitting", as cited in the claim.

Regarding dependent claim 10, the prior arts fail to teach "the step of returning said receiver to a powered-up mode in response to the setting of a power-up flag in said receiver input buffer", as cited in the claim.

Regarding dependent claims 12, 41 and 47, the prior arts fail to teach "step of transmitting comprises the steps of: encapsulating said buffered data using a multi-protocol encapsulator to form encapsulated data; and transmitting said encapsulated data as said transmission burst", as cited in the claim.

Regarding dependent claims 21 and 39, the prior arts fail to teach "said pre-determined powered-up time occurs at the setting of a flag indicating an almost-empty byte count in said receiver input buffer", as cited in the claim.

Regarding dependent claim 23, the prior arts fail to teach "wherein said incremental period of time comprises a member of the group consisting of: a bit rate adaptation time, a receiver switch-on time, a receiver acquisition time, and a bit-rate variation time interval", as cited in the claim.

Regarding dependent claims 26 and 35, the prior arts fail to teach "said pre-determined powered-down time occurs at the setting of a flag indicating an almost-full byte count in said receiver input buffer", as cited in the claim.

Regarding dependent claim 32, the prior arts fail to teach "wherein a usage factor for said receiver input buffer is a function of a usage factor for said service input buffer", as cited in the claim.

Regarding dependent claim 48, the prior arts fail to teach "a second multi-protocol encapsulator for encapsulating said second streaming information", as cited in the claim.

Regarding dependent claim 51, the prior arts fail to teach "said digital broadcasting transmitter is responsive to said service input buffer such that if the amount of data stored in said service input buffer meets a predetermined amount said digital broadcast transmitter transmits said data stored in said service input buffer as a transmission burst", as cited in the claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 10, 2006